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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,090	04/12/2004	Thomas Patrick Dawson	50N3272.02	3169

27774 7590 06/12/2006

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EXAMINER

JAWORSKI, FRANCIS J

ART UNIT	PAPER NUMBER
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3768

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/823,090

Applicant(s)

DAWSON, THOMAS PATRICK

Examiner

Jaworski Francis J.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/27/2004 IDS.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/27/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

The status of parent cases 10/353,225 and 09/690,571 should be updated in specification para [0001] to reflect the respective maturations into U.S. Patent Nos. 6,729,337 and 6,536,440 respectively.

Appropriate correction is required.

Claim Objections

Claims 5 – 8 are also objected to because of the following informalities: the terminology ‘expanding a radius of each of the points in the array’ is awkward in the electronic sense since a point is non-dimensional and therefore does not literally have a radius to expand. It is believed that what applicant is in fact doing is using each ultrasound array element as an unfocussed point source such that the acoustic emission into the cortex is a set of spherically expanding acoustic wavefronts as per specification paras [0092 – 0096].

See also claim 11 which escapes this objection basis and claim 13 which also passes muster since the language pertains to expanding about affected points on the visual cortex..

Appropriate correction is required.

Claim Rejections - 35 USC § 101

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35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 – 21 are rejected under 35 U.S.C. 101 because the claims do not proceed to result in a 'useful, concrete and tangible result'.

Current USPTO guidelines (posted on the USPTO Website 10/26/2005 and promulgated in the Official Gazette 11/22/05) require that if a claim produces no physical transformation of an object then the Examiner proceed to analyze regarding the latter phraseology. Here, in each instance the claims do not proceed to include that the generated or scanned pattern is applied to remedy a sensory deficit in a human patient, but rather limit to the abstract result of a modified or directed signal pattern.

Dependent claims variously inherit the defects.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

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be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 – 5, 9 - 11 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of U.S. Patent No.6,889,085.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent claims variously a method of using an ultrasound array to generate sensory data using an emission energy pattern , understood in the claims' context to pertain inter alia to data associated with perceived sensory experiences but more broadly worded. An array having a natural focus for each transducer, it would have been inherently obvious for the claimed wavefront to expand distal in depth to the focal length. Since the patent claims applying the sensory pattern to one or more locations, plural such locations are fairly characterizable as an 'entire region', region size unspecified.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1 – 5 and 9 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fatemi et al (US6511429), alone or further in view of Fatemi (US6709407) or Lenhardt (US6394969).

The former teaches in one interpretation that a pulse-scanned ultrasound array would inherently act to generate a 'perceived sensory experience' in the fetus with the argument that at least some auditory sensation would occur, provided that the switch 32 of col. 8 lines 5 – 12 is left with fetal monitor function disabled and the acknowledged general scanning case of col. 2 lines 30 – 44 is practiced. In the alternative, if Fatemi et al be viewed as a composite teaching away from auditory cortex stimulation in deference to its title, then it would have been nonetheless obvious in view of Fatemi to provide such cortical ultrasound stimulation to a fetus, and in view of Lenhardt, in the alternative to provide such in direct fashion to a human patient of any age for therapeutic purposes.

Allowable Subject Matter

Claims 6 – 8 would be allowable if the above objection and 35 USC101 deficiencies are corrected and the limitations of the base claim and any intervening claims be incorporated therein.

Claim 12 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and the 35 USC101 deficiency be remedied..


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Claims 13 – 21 would be allowable upon obviation of the 35USC101 rejection
supra.

Any inquiry concerning this communication should be directed to Jaworski
Francis J. at telephone number 571-272-4738.

FJJ:fjj

051706



Francis J. Jaworski
Primary Examiner